5

10

ABSTRACT

A hydraulic shift gear mechanism for a bicycle having a positioning mechanism for controlling the motion of the piston of a master cylinder assembly is disclosed, wherein the master cylinder assembly is in communication with a slave cylinder for operation of a derailleur. The positioning mechanism preferably includes a pivot shaft spaced apart from the handlebar, a rotating member rotatable about the pivot shaft, a push mechanism for rotating the rotating member in a first direction and a return mechanism for rotating the rotating member in a second direction. The push mechanism preferably includes a first latch segment which engages a corresponding push pawl to rotate the rotating member. The return mechanism preferably comprises a second latch segment and a return pawl, the return pawl having a first claw and a second claw which alternately engage the second latch segment. The rotating member is preferably operatively engaged with the piston of the master cylinder, wherein the rotation of the rotating member translates to an axial motion of the piston rod. In a more preferred embodiment of the invention, an adjuster piston is threadingly engaged with the master cylinder assembly for adjusting the initial position of the slave cylinder.

25